Review Questions

CHAPTER 4: PESTICIDE FORMULATIONS

Write the answers to the following questions, and then check your answers with those in the back of this manual.

- 1. The name "Sevin 5G" on a pesticide label indicates:
 - **A.** A granular pesticide with 5 percent inert ingredients.
 - **B.** A gel pesticide with 5 percent active ingredients.
 - **C.** A granular pesticide with 5 percent active ingredients.
 - **D.** A gel pesticide with 5 percent inert ingredients.
- 2. Which is the pesticide formulation process by which solid particles are dispersed in a liquid?
 - A. ULV solvents.
 - **B.** Solution.
 - **C.** Suspension.
 - **D.** Emulsion.
- 3. Which liquid pesticide formulation consists of a small amount of active ingredient (often 1 percent or less per unit volume) dissolved in an organic solvent?
 - **A.** Emulsifiable concentrate (EC).
 - **B.** Ready-to-use low-concentrate solutions (RTU).
 - **C.** Ultra-low volume (ULV).
 - **D.** Flowables (F)/liquids (L).
- 4. Which liquid pesticide formulation may approach 100 percent active ingredient?
 - **A.** Emulsifiable concentrate (EC).
 - **B.** Ready-to-use low-concentrate solutions (RTU).
 - **C.** Ultra-low volume (ULV).
 - **D.** Aerosols (A).

- 5. Which is a disadvantage of both EC and ULV formulations?
 - **A.** Solvents may cause rubber or plastic hoses, gaskets, and pump parts and surfaces to deteriorate.
 - **B.** Contribute to abrasive wear of nozzles and pumps.
 - **C.** Require constant agitation to keep in suspension.
 - **D.** Difficult to handle, transport, and store.
- 6. Which dry/solid formulation is mixed in water and reduces the risk of inhalation exposure during mixing and loading?
 - A. Dusts (D).
 - **B.** Wettable powders (WP).
 - **C.** Soluble powders (SP).
 - **D.** Water-dispersable granules (WDG) or dry flowables (DF).
- 7. Which type of dry/solid pesticide formulation consists of particles that are the same weight and shape?
 - A. Dusts.
 - **B.** Granules.
 - C. Pellets.
 - D. Baits.
- 8. Which is an advantage of microencapsulated materials?
 - **A.** They pose few hazards to bees.
 - **B.** Delayed or slow release of the active ingredient prolongs its effectiveness.
 - **C.** Their pesticidal activity is independent of weather conditions.
 - **D.** They usually require only short restrictedentry intervals.

- 9. Which type of adjuvant functions as wetting agents and spreaders (i.e., they physically alter the surface tension of spray droplets)?
 - **A.** Surfactants.
 - **B.** Stickers.
 - **c.** Extenders.
 - **D.** Buffers.

- 10. Which type of adjuvant increases the viscosity of spray mixtures?
 - **A.** Stickers.
 - **B.** Extenders.
 - **c.** Plant penetrants.
 - **D.** Thickeners.